Monterey Bay National Marine Sanctuary

Sanctuary Ecologically Significant Areas (SESAs)

Sanctuary Advisory Council Meeting
December 13, 2012

Agenda

I. 15 minute presentation
II. Input on SESA criteria
III. Review data related to research interests
IV. Review SESA map
V. Review EFH timeline
VI. SESA GIS Project demo & view video

SAC Input and Discussion
December 13, 2012

I. What are Sanctuary Ecologically Significant Areas?

- SESAs encompass remarkable, representative and/or sensitive marine habitats, communities and ecological processes and facilitate research to better understand natural and human-induced variation
- SESAs are not currently part of the MBNMS regulatory regime, yet will be used an applied as a tool to focus efforts
- SESAs study area is offshore federal waters, including Davidson Seamount
- SESAs will focus initially on benthic (seafloor) habitats

I. Why is MBNMS identifying Sanctuary Ecologically Significant Areas?

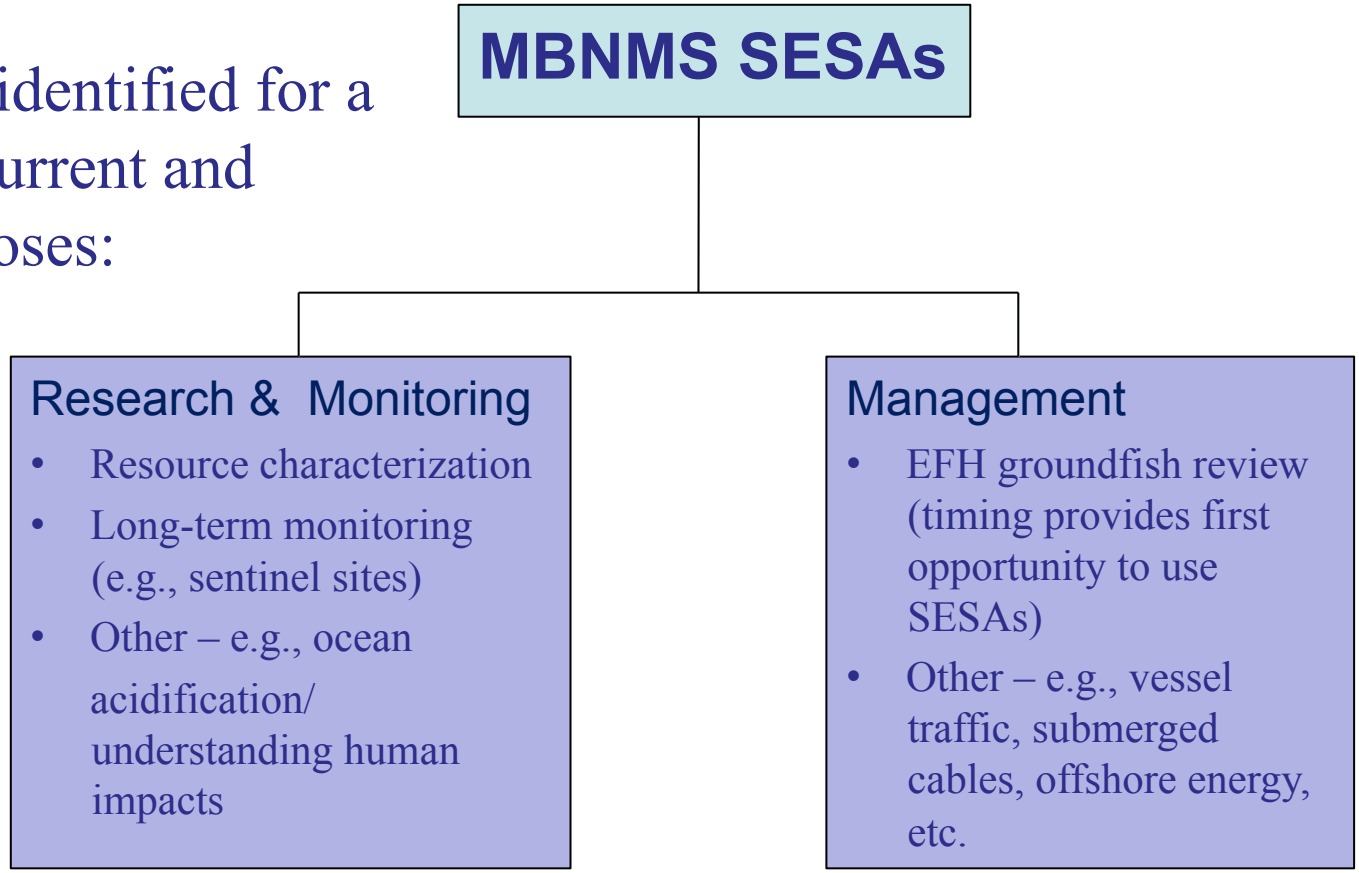
1) MBNMS has a mandate to understand the area under its jurisdiction – process is a way to prioritize

2) MBNMS needs a scientific process to guide our research and management agenda (includes addressing our EBM goals)

3) MBNMS uses an adaptive management approach to anticipate emerging issues and be forward thinking

I. How will Sanctuary Ecologically Significant Areas be used?

SESAs are identified for a variety of current and future purposes:



I. MBNMS criteria for identifying benthic focused SESAs

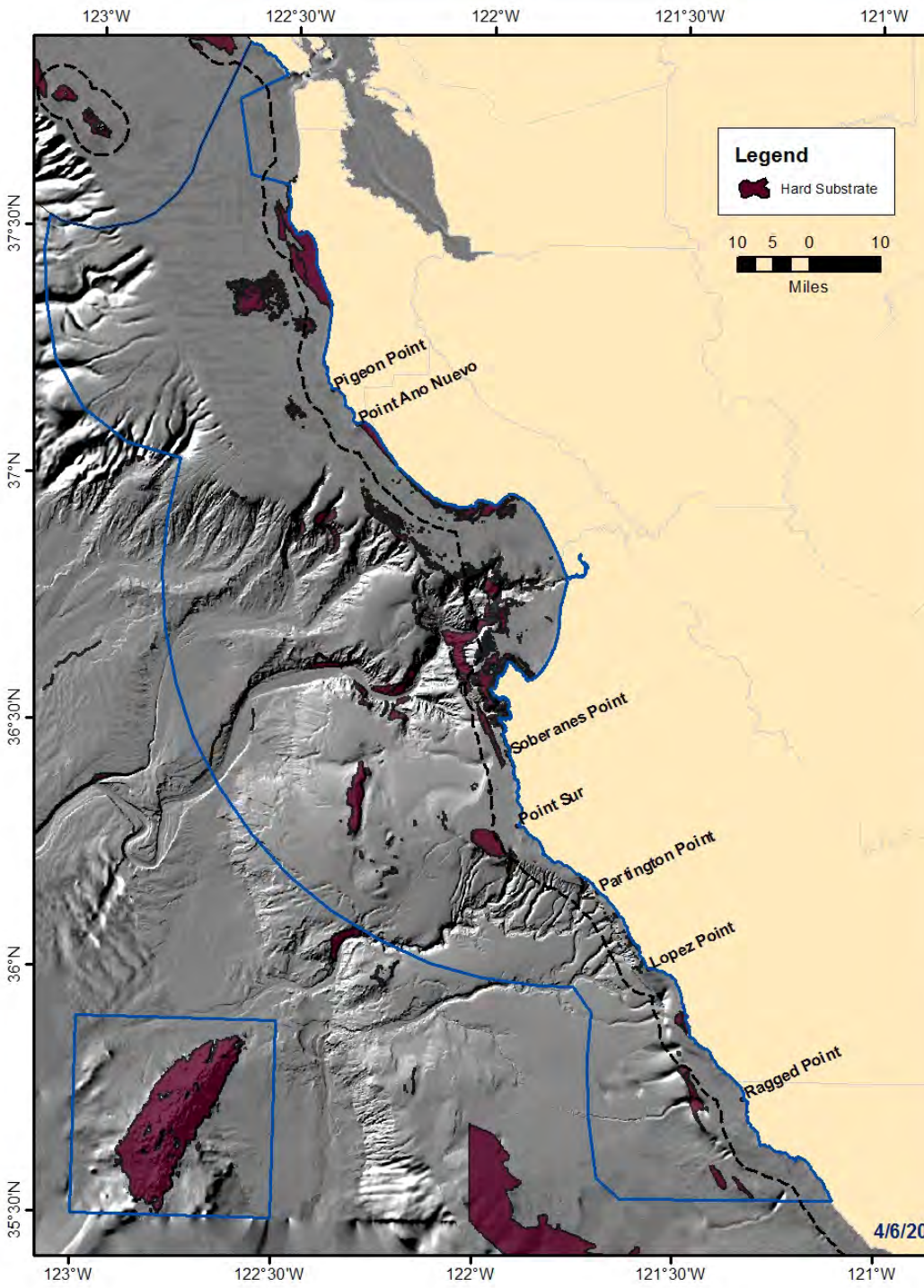
Primary criteria focus on benthic resources or scientific research and include:

- Benthic habitat heterogeneity
- Structure-forming invertebrates
- Benthic biodiversity
- Research and monitoring

I. MBNMS Criteria

Primary criteria:

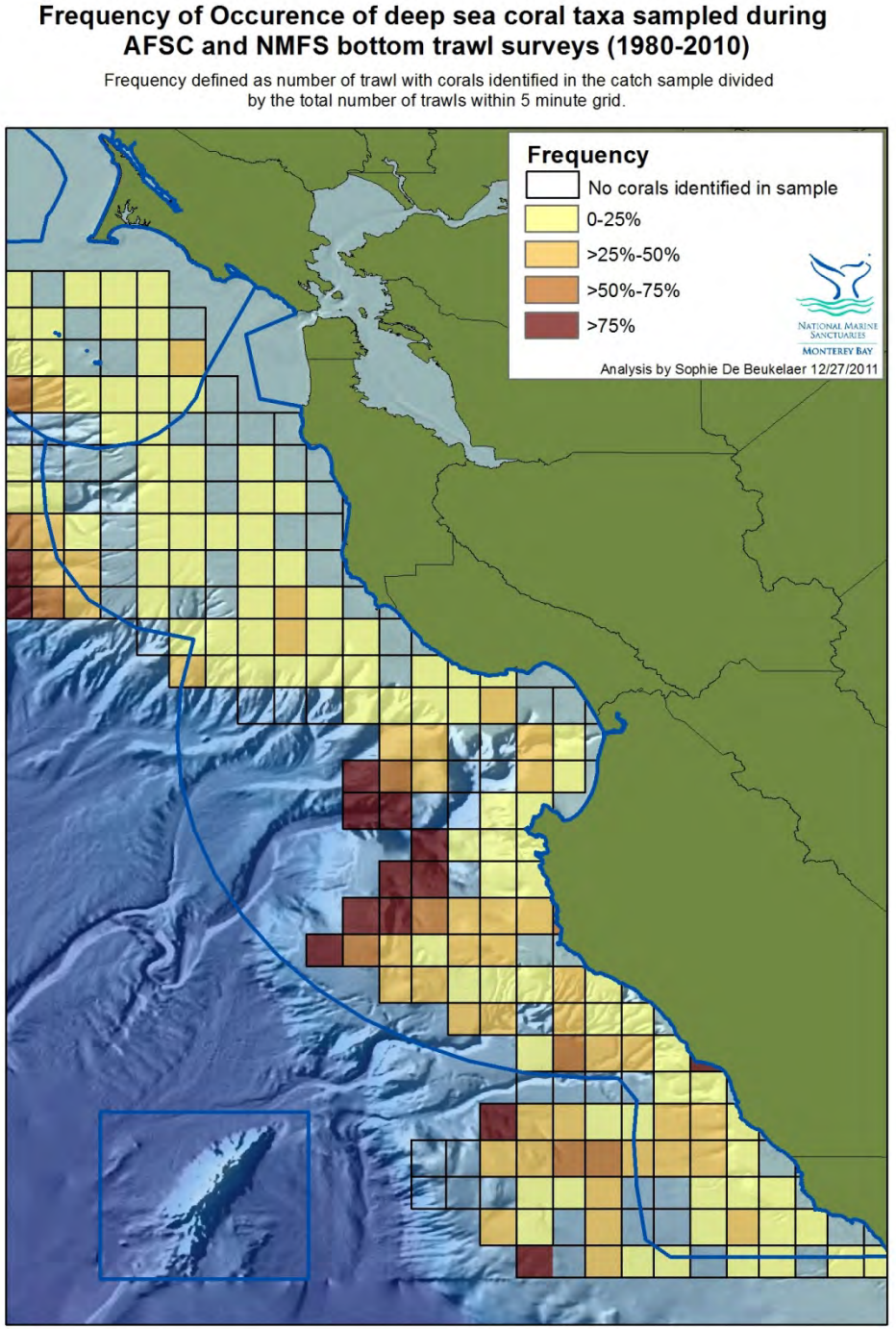
- Benthic habitat heterogeneity
  - Hard bottom
  - Large geologic features (e.g., seamounts, ridges)
  - Primary benthic habitat types (depth and substrate type)
  - Habitat richness and diversity
  - Steepness
- Structure-forming invertebrates
- Benthic biodiversity
- Research and Monitoring



I. MBNMS Criteria

Primary criteria:

- Benthic habitat heterogeneity
- Structure-forming invertebrates
  - Corals and sponges
  - Chemosynthetic Biological Communities (aka cold seeps)
  - Other (e.g,. crinoids, brachiopod beds, aggregations of large *Metridium*)
- Benthic biodiversity
- Research and Monitoring



I. MBNMS Criteria

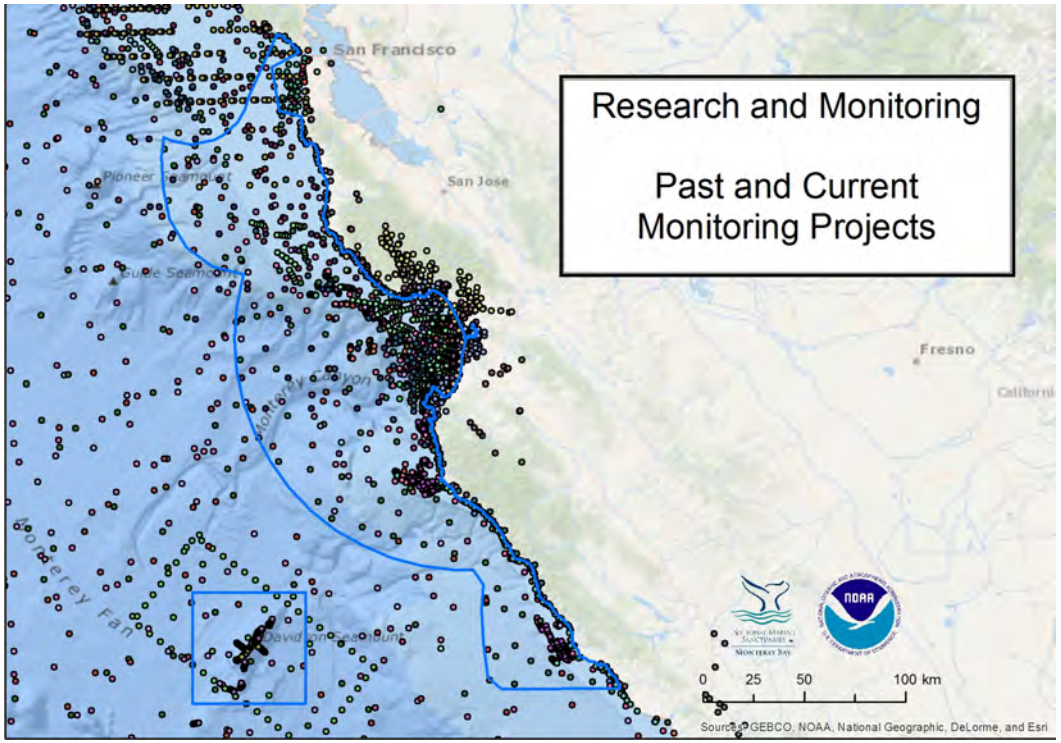
Primary criteria:

- Benthic habitat heterogeneity
- Structure-forming invertebrates
- Benthic biodiversity
  - Species richness
  - Species diversity
- Research and Monitoring

I. MBNMS criteria for identifying benthic focused SESAs

Primary criteria:

- Benthic habitat heterogeneity
- Structure-forming invertebrates
- Benthic biodiversity
- Research and Monitoring
  - Imagery Available
  - Fixed Monitoring Station
  - Past Research
  - SIMoN Monitoring projects
  - Other past research



I. MBNMS criteria

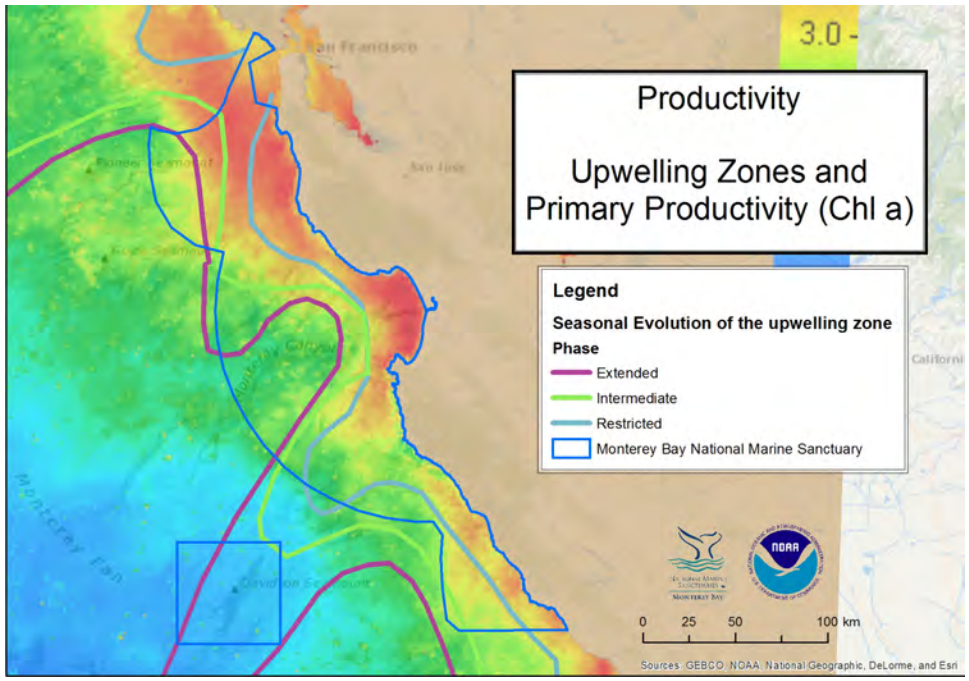
Secondary criteria provide additional information that can help in refining selection of SESAs, and include:

- Pelagic Biodiversity and Productivity
- Relevant Spatial Management
- Past Benthic Impacts

I. MBNMS criteria

Secondary criteria:

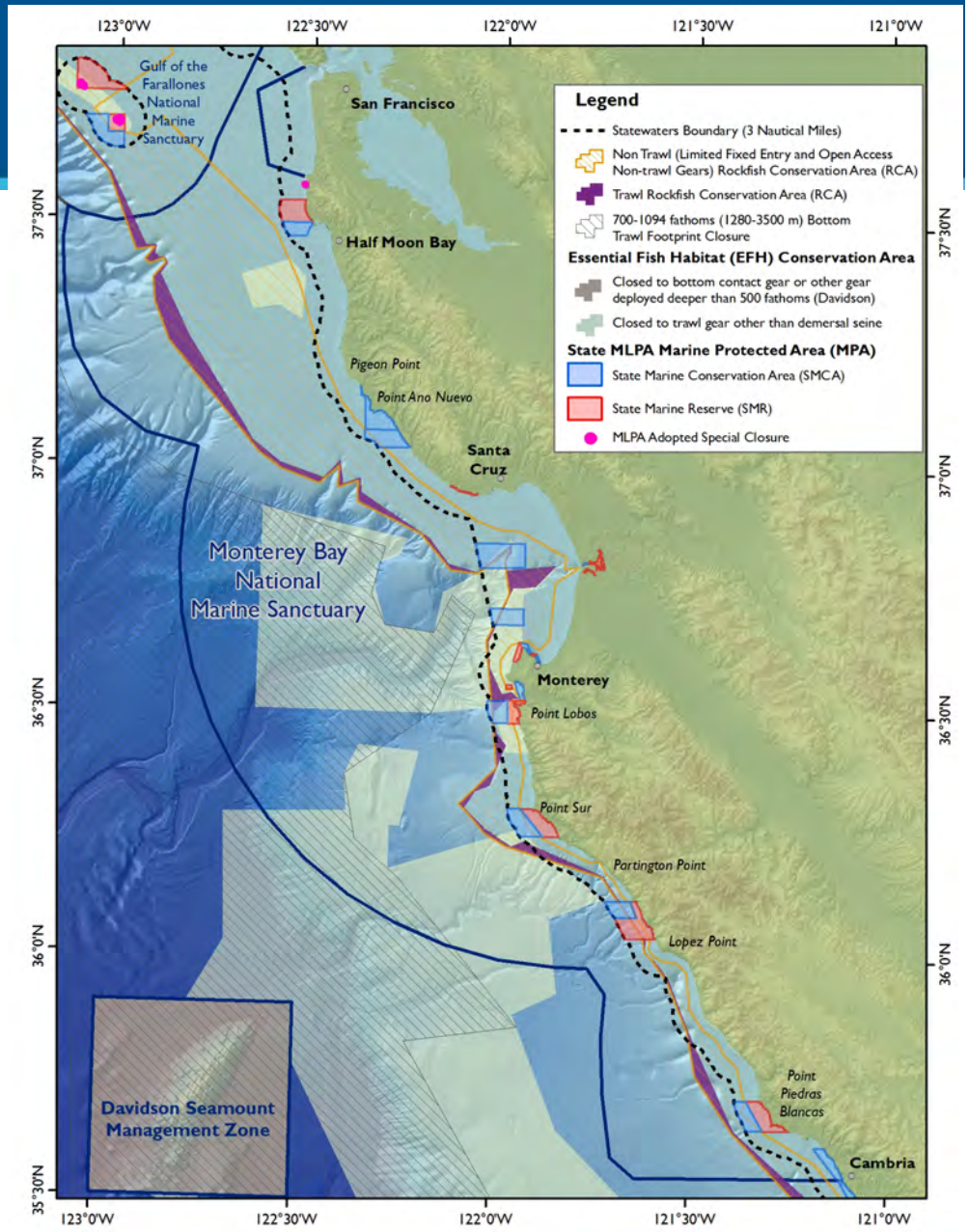
- Pelagic Biodiversity & Productivity
  - Upwelling Zones
  - Primary Productivity
  - Bird, Mammals, Turtle Hot spots/Important Foraging Areas
  - Migratory Corridors
  - Krill hotspots
- Relevant Spatial Management
- Past benthic impacts



I. MBNMS criteria

Secondary criteria:

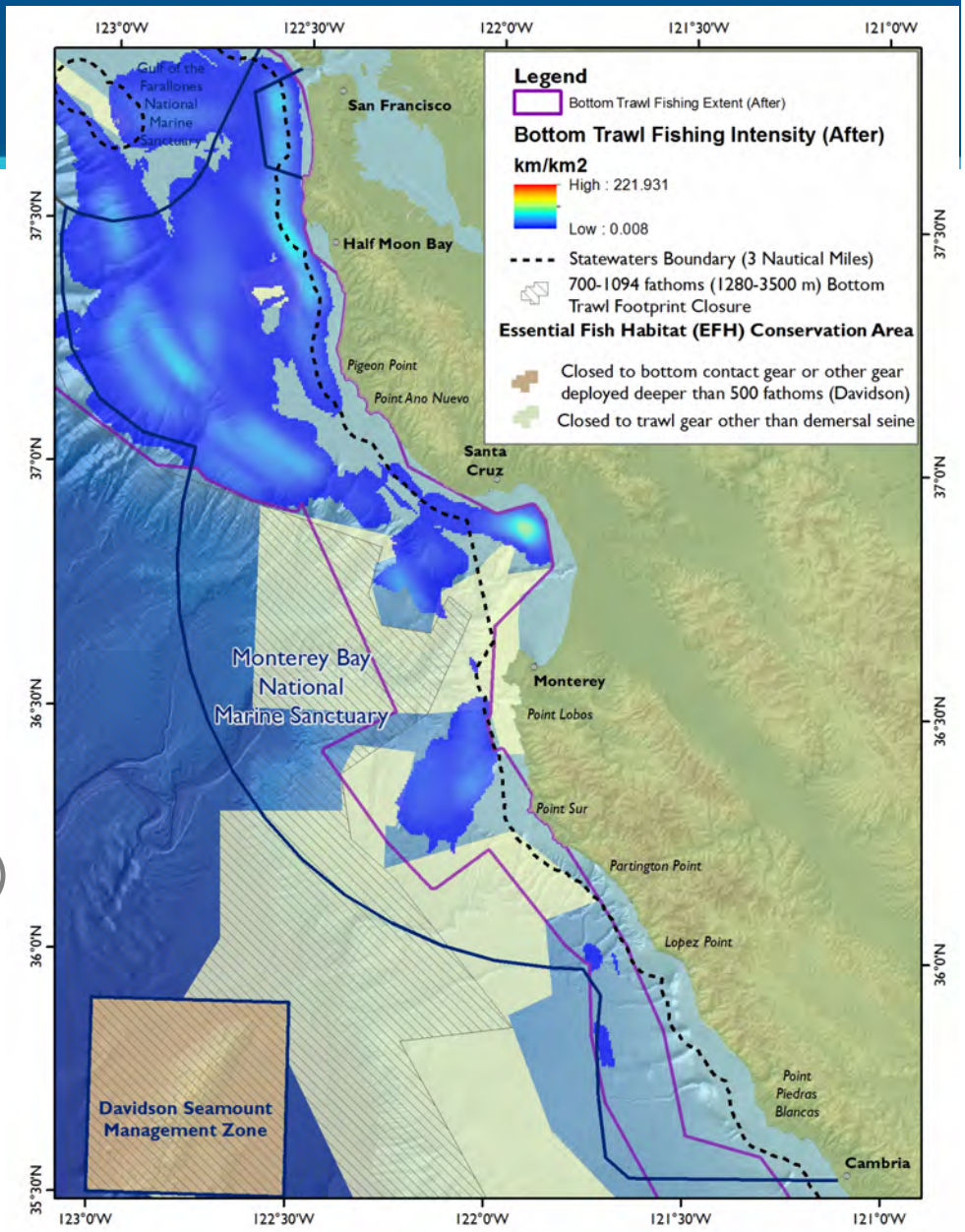
- Pelagic Biodiversity & Productivity
- Relevant Spatial Management
  - State MLPA MPAs
  - Trawl Rockfish Conservation Area
  - EFH Conservation Areas
  - 700 fathom polygon
  - Northern Management Area
- Past benthic impacts



I. MBNMS criteria

Secondary criteria:

- Pelagic Biodiversity & Productivity
- Relevant Spatial Management
- Past Benthic Impacts
  - Historic trawl intensity
  - Location submerged cables
  - Marine debris (lost containers)
  - Other?



I. Approach to Identifying SESAs

- Analyzing best available data on resources in MBNMS
- Gathering local knowledge from stakeholders, scientists and partners on MBNMS resources
- Meeting with members of the trawl fleet and the conservation community to better understand issues & opportunities

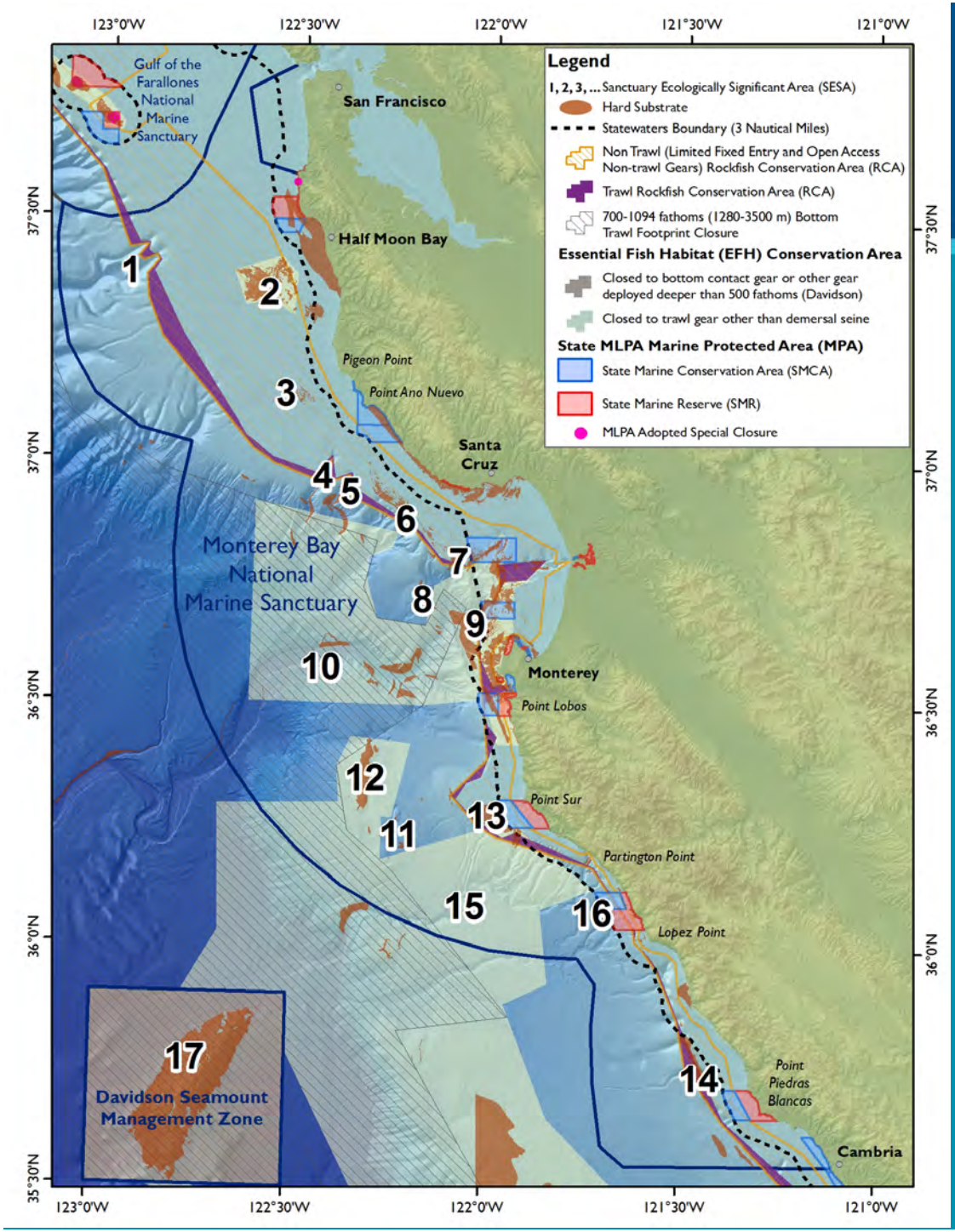
II. Input on GIS data layers

1. Are we missing any data layers that address the criteria?

2. Will new information be coming out?

III. RAP & CWG Input on Research conducted, needs, & future plans

SESA#	Name	Has research been conducted here?	Research (description of Research conducted)	Imagery available inside area?	Monitoring stations in or near area?	Publications	Interest in future research in area?	SIMoN Monitoring Project inside area?
1	**Pioneer Canyon/NMA**	Yes	Long term research collection from NMFS surveys, No MBNMS research	No	NMFS groundfish trawl stations; ACCESS transects	Hartwell 2008 (contaminents in sediment); Forney et al. (CSCAPE seabird and mammals surveys)		100247 (usSEABED), 100273 (CSCAPE), 100382 (ACCESS)



NATIONAL MARINE SANCTUARIES

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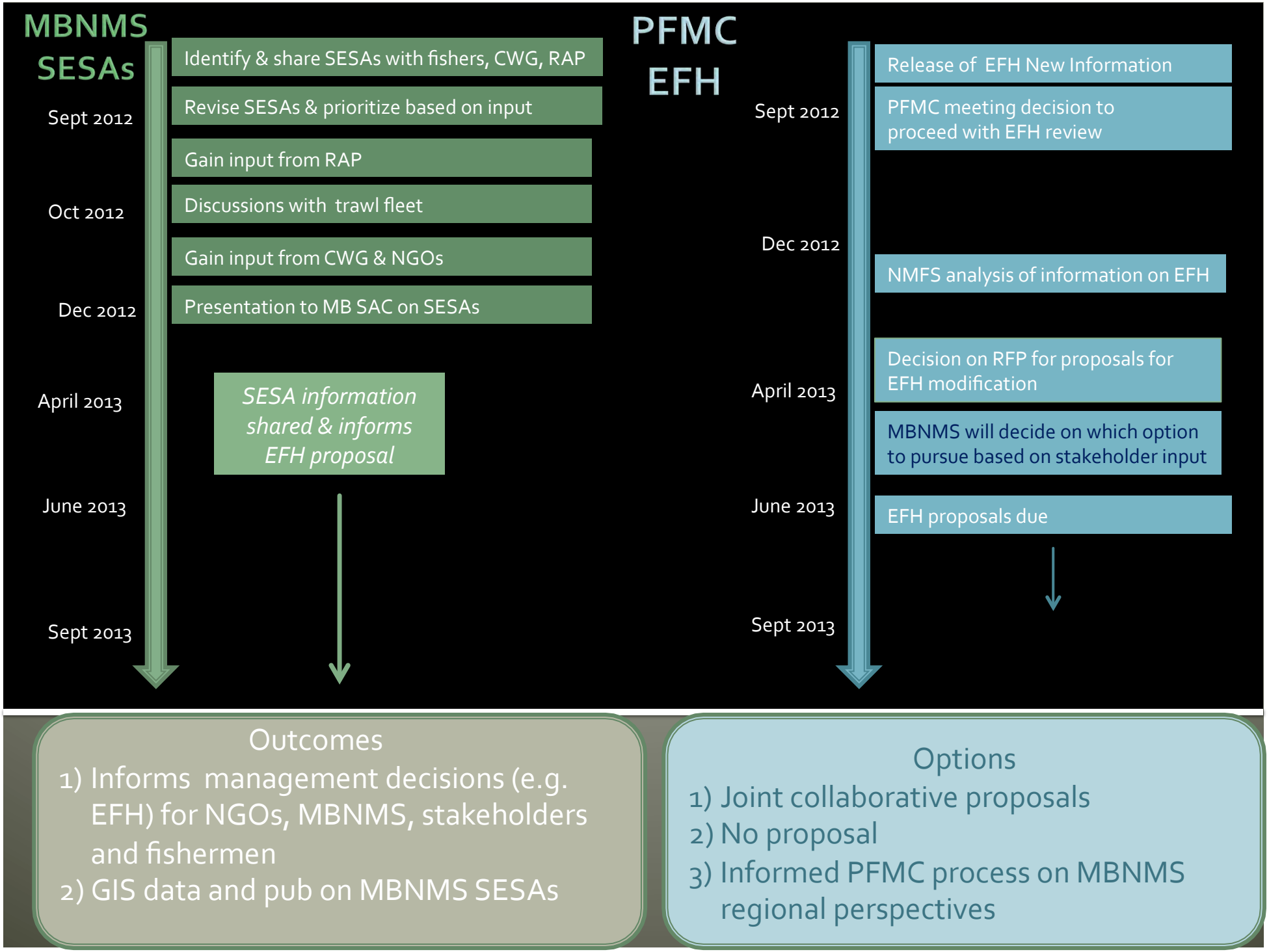
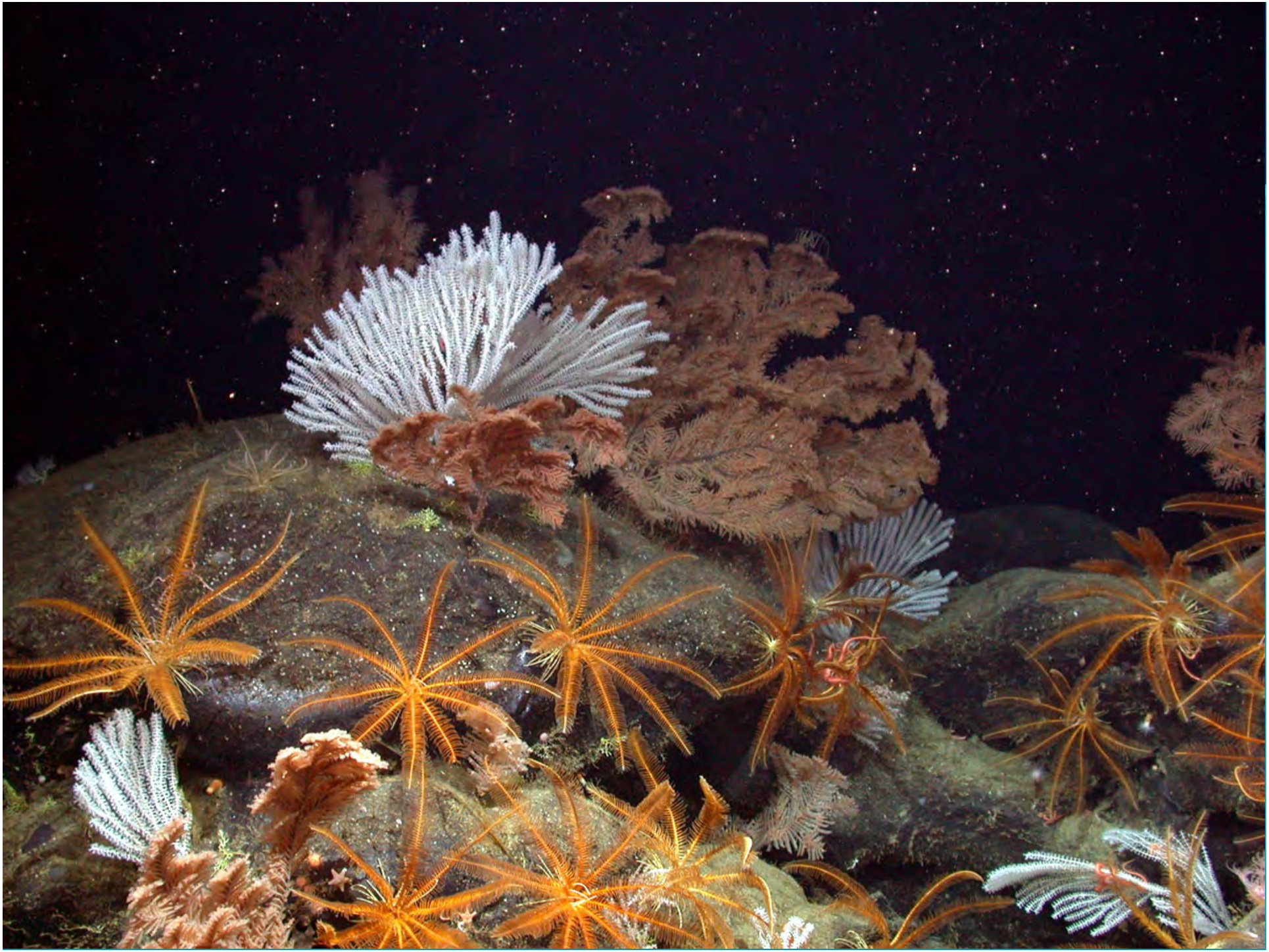
IV. DRAFT SESAs


MBNMS SESAs
Identify & share SESAs with fishers, CWG, RAP
Sept 2012
Revise SESAs & prioritize based on input
Gain input from RAP
Oct 2012
Discussions with trawl fleet
Gain input from CWG & NGOs
Dec 2012
Presentation to MB SAC on SESAs
April 2013
SESA information shared & informs EFH proposal
June 2013
Sept 2013
PFMC EFH
Sept 2012
Release of EFH New Information
PFMC meeting decision to proceed with EFH review
Dec 2012
NMFS analysis of information on EFH
April 2013
Decision on RFP for proposals for EFH modification
MBNMS will decide on which option to pursue based on stakeholder input
June 2013
EFH proposals due
Sept 2013
Outcomes
1) Informs management decisions (e.g. EFH) for NGOs, MBNMS, stakeholders and fishermen
2) GIS data and pub on MBNMS SESAs
Options
1) Joint collaborative proposals
2) No proposal
3) Informed PFMC process on MBNMS regional perspectives

DRAFT SESAs

VI. Review GIS SESA Project & Video